

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A process for implementing a redundant switched full-duplex Ethernet type communication network including at least two independent elementary networks, each elementary network including at least one source subscriber equipment and at least one destination subscriber equipment, connected to each other through at least one physical link through at least one switch, each equipment being connected to each of these elementary networks, the process comprising:

performing a frame by frame redundancy on each elementary network, wherein the performing the frame by frame redundancy includes:

transmitting frames on the elementary network, including the steps of:

adding a numbering field in each frame transmitted through the switch to insert a frame number, and

sending each frame with the added numbering field on each of the elementary networks; and

receiving the transmitted frames on the elementary network, including the steps of:

storing the received frame number, and

accepting the received frame only within a predetermined time window if its frame number has not already been received during the predetermined time window.

Claim 2 (Original): A process according to claim 1, wherein there are two elementary networks.

Claims 3-5 (Cancelled).

Claim 6 (Currently Amended): A process according to claim [[4]] 1, wherein ~~the a virtual link concept is used, which is a conceptual view of~~ provides a link from [[a]] the source equipment to the at least one destination equipment.

Claim 7 (Original): A process according to claim 6, wherein a virtual link number is accepted in the numbering field.

Claim 8 (Currently Amended): A process according to claim 6, wherein [[a]] the virtual link ~~is characterized by~~ has:

a transfer direction, the virtual link being single directional; ~~a source equipment; one or plural items of destination equipment;~~ a fixed passband; a maximum guaranteed time for transfer of packets from [[a]] the source equipment to [[a]] the destination equipment; a fixed path on the network; and a unique identifier.

Claim 9 (Original): A process according to claim 1 used for implementation of a redundant switched full-duplex Ethernet type communication network in avionics.

Claim 10 (New): The process according to claim 6, wherein the steps used in the subscriber equipment and applied by a virtual link onto the network are such that:

in transmission, for each frame received from a communication stack:

adding a numbering field so that a counter numbers the frame corresponding to each virtual link, and

sending the frame onto the elementary networks;

in reception, for each frame assigned to a virtual link:

storing the frame number, and

accepting the frame if the frame number has not already been received, and if it has been received, destroying the frame.

Claim 11 (New): The process according to claim 6, wherein the implementation of several services in each subscriber equipment includes:

a transmission service, the role of which is to enable an application to access virtual links in transmission, wherein this service multiplexes virtual links towards a physical link through an Ethernet interface, and for each virtual link sends packets as a function of the passband allocated to the virtual link, and

a reception service that decodes frames, checks the format of the frame and makes useful data available to applications.

Claim 12 (New): The process according to claim 8 implementing a service for protection of a passband in the switch, which for each incoming virtual link is capable of checking time characteristics of packets, the packets being destroyed if allowable time characteristics are exceeded.

Claim 13 (New): The process according to claim 11, wherein the application treats each virtual link as a queue.

Claim 14 (New): The process according to claim 10, wherein the same frame number can be used for two different virtual links.